State of California AIR RESOURCES BOARD

Summary of Board Meeting June 26, 2008

California Air Resources Board Byron Sher Auditorium, Second Floor 1001 I Street Sacramento, California

MEMBERS PRESENT: Mary Nichols, Chairman

Dr. John Balmes Ms. Sandra Berg Supervisor Jerry Hill Ms. Lydia Kennard Mrs. Barbara Riordan Professor Daniel Sperling

Dr. John Telles

Agenda Item

08-6-1: Health Update: Estimating the Direct Health Effects of Temperature and Heat Waves in California

SUMMARY OF AGENDA ITEM:

The Office of Environmental Health Hazard Assessment (OEHHA) performed several studies to examine the effects of temperature on both death and hospitalization in California and presented their results to the Board.

OEHHA staff reviewed the findings of several of their studies including: the effects of changes in average temperature on death in nine California counties; the identification of subgroups of the population that are particularly vulnerable to higher temperatures; an analysis of the mortality impacts of the July 2006 heat wave; and preliminary evidence of the effects of temperature on hospitalization. Overall, they found evidence for an effect of temperature extremes on public health in California.

Chairman Nichols thanked OEHHA staff for the presentation and stated that as plans for mitigating emissions of greenhouse gas are developed, the Board needs to think about how some communities might be more affected by increased temperature than others. Board Member Balmes mentioned that it is not necessarily the hottest parts of California that are most at risk and that there is a documented increase in emergency room visits as a result of the 2006 heat wave. Board Member Telles agreed and stated that it was his personal observation that elevated temperature and hospital visits are directly related. He further mentioned that when the

temperature increases, the hospital emergency rooms fill up and the ambulance crews need to care for patients waiting to be admitted into the emergency room. This lack of available ambulances can become a major health hazard if medical emergencies arise.

ORAL TESTIMONY: None

FORMAL BOARD ACTION: None (Informational Item)

RESPONSIBLE DIVISION: Research Division/OEHHA

STAFF REPORT: No

08-6-2: Public Meeting to Consider the Approval of a Grant Under the Innovative Clean Air Technologies (ICAT) Program

SUMMARY OF AGENDA ITEM:

Under the Board's Innovative Clean Air Technologies (ICAT) program, staff recommended co-funding in the amount of \$199,811 to Honeywell Laboratories for the project "Demonstration of Particulate Matter Sensor in Post-DPF Environment."

The Board members discussed some details of the project, and staff answered their questions. Board members also asked staff about the merits of recovering some or all of ICAT expenses from grantees, especially those who successfully commercialize technologies upon completion of their ICAT projects. Staff replied that this possibility has been considered in the past but several hurdles exist, including the lack of legal authority to collect money. The Board then requested staff to investigate the issue further and report back to the Board at a future date.

ORAL TESTIMONY: None

FORMAL BOARD ACTION: The Board voted unanimously to approve

Resolution number 08-31.

RESPONSIBLE DIVISION: Research Division

STAFF REPORT: No.

08-6-3: Climate Science Update: Climate Change Impacts of Non-Kyoto Greenhouse Gas

SUMMARY OF AGENDA ITEM:

This was the fourth in a series of semiannual updates to the Board on recent, significant findings in climate change scientific research. In addition to the six greenhouse gases identified in the Kyoto Protocol, several other man-made pollutants, including those emitted primarily as combustion byproducts, have significant global warming potential (GWP). These include stratospheric, ozone-depleting substances (ODS), carbon monoxide, nitric oxide, and particulate matter, which consists substantially of black carbon. This update provided recent scientific findings on such pollutants.

Professor Michael Prather was invited to give this presentation. Professor Prather is the Fred Kavli Endowed Chair in the Department of Earth System Science at the University of California, Irvine, and is one of the world's foremost experts on greenhouse gas. Dr. Prather reviewed anthropogenic climate forcing from the non-Kyoto greenhouse gas and aerosols. Currently, the impacts of aerosols, ozone precursors, indirect forcing of methane, and the chlorofluorocarbons (CFC) are comparable to the Kyoto gases. All are expected to grow over the twenty-first century, but carbon dioxide will become more dominant.

In terms of defining a GWP so that the non-Kyoto gases can be traded with Kyoto gases in a climate change strategy, there are some clear areas and some fuzzy ones. Many of the long-lived gases not included in Kyoto (e.g., chlorine-containing organic compounds that are used as refrigerants (CFC, Hydrochlorofluorocarbons), nitrogen trifluoride (NF $_3$), and fluoroethers) have well defined GWPs published by the Intergovernmental Panel on Climate Change (IPCC) and could be included. Some criteria pollutants (carbon monoxide and volatile organic compounds), and even hydrogen, have reasonably well defined GWPs through atmospheric chemistry, indirectly enhancing methane abundances, and increasing tropospheric ozone. GWPs for nitrogen oxides (NO $_X$) emissions would be more difficult to establish; the resulting decrease in methane and increase in ozone tend to cancel each other and the magnitude of the effects depends greatly on the latitude and season of emissions.

Overall, aerosols cool, but black carbon (a.k.a. soot) and other absorbing aerosols can warm. Negative GWPs (i.e., cooling) by aerosols pose a challenge for any trading scheme, and the positive GWPs for black carbon aerosols have only been estimated by individual researchers and do not always include the large and negative indirect forcing from alteration of clouds by aerosols (including black carbon). There are sound scientific reasons for the IPCC not including GWP values for aerosols. Current California GWP-weighted emissions of chlorofluorocarbons are larger than the major Kyoto gases, methane, and nitrous oxide. These ODSs, no

longer used in any quantity, are being emitted from the existing bank (primarily insulating foam), and depending on recovery costs could provide a near-term opportunity for reducing greenhouse gas emissions.

ORAL TESTIMONY: None

FORMAL BOARD ACTION: None (Informational item)

RESPONSIBLE DIVISION: Research Division

STAFF REPORT: No

08-6-4: Report to the Board on an Initial Draft of a Plan to Reduce Greenhouse Gas Emissions in California (AB 32 Scoping Plan)

SUMMARY OF AGENDA ITEM:

Staff provided an overview of the Draft Scoping Plan pursuant to the California Global Warming Solutions Act of 2006 (AB 32). The Draft Plan outlines a preliminary recommendation for achieving the State's goal of reducing greenhouse gas emissions to 1990 levels by 2020. The preliminary recommendation outlines a suite of cost-effective and technologically feasible greenhouse gas emission reduction measures, with key elements falling under five categories:

- Expansion and strengthening of existing energy efficiency programs and building and appliance standards.
- Expansion of the Renewables Portfolio Standard to 33 percent.
- Development of a California cap-and-trade program that links with other Western Climate Initiative Partner programs to create a regional market system.
- Implementation of existing State laws and policies, including California's clean car standards, goods movement measures, and the Low-Carbon Fuel Standard.
- Targeted fees to fund the State's long-term commitment to AB 32 administration.

Staff presented other measures that are still undergoing evaluation for possible inclusion in the Proposed Scoping Plan, which is scheduled to be released in October. As part of an ongoing process to address AB 32's requirements, the presentation also summarized results of the evaluations performed to date and described additional work underway.

Staff will revise the Draft Plan based on public comment and additional evaluation. The Proposed Scoping Plan will be considered by the Board at its November meeting.

ORAL TESTIMONY:

Bob Epstein, Environmental Entrepreneurs

Laurie Wayburn, Pacific Forest Trust

Chris Busch, Union of Concerned Scientists

Patricia Monahan, Union of Concerned Scientists

Susie Berlin, Northern California Power Agency

Tim O'Connor, Environmental Defense Fund

Audrey Chang, Natural Resources Defense Council

Diane Bailey, Natural Resources Defense Council

Bruce McLaughlin, California Municipal Utilities Association

Bud Beebe, Sacramento Municipal Utility District

Bonnie Holmes-Gen, American Lung Association of California

Shankar Prasad, Coalition for Clean Air

Cathy Reheis-Boyd, Western States Petroleum Association

Stuart Cohen, Transportation and Land Use Coalition

Bill Magavern, Sierra Club California

Tim Frank, Sierra Club California

Elliot Hoffman, New Voice of Business

Julia May, Communities for a Better Environment

Matt Vander Sluis, Planning and Conservation League

Tim Carmichael, Coalition for Clean Air

Michelle Passero, The Nature Conservancy

Jason Barbose, Environment California

LeiLani Johnson Kowal, Los Angeles Department of Water and Power

Gary Gero, California Climate Action Registry

Timothy Papandreon, Los Angeles County Metropolitan Transportation Authority

Kevin Fay, International Climate Change Partnership

Ann Chan, Pacific Forest Trust

Charles Frazier. California Black Chamber of Commerce

FORMAL BOARD ACTION: None (Informational Item)

RESPONSIBLE DIVISION: Office of Climate Change

STAFF REPORT: No

08-6-5: Public Hearing to Consider Proposed Amendments to the California Consumer Products Regulation

SUMMARY OF AGENDA ITEM:

Staff proposed amendments to the existing California Consumer Products Regulation, which would add volatile organic compound (VOC) limits for seven additional categories and would lower limits for twelve previously regulated categories. Staff also proposed a global warming potential (GWP) limit for Pressurized Gas Duster products, toxics prohibitions for seven categories, an exemption of Hydrofluoroether 7200 from the definition of VOC, and other revisions or clarifications to existing regulatory products.

The proposed amendments to reduce VOC emissions would partially fulfill the consumer products reduction commitment contained in the State Strategy for California's 2007 State Implementation Plan (SIP) to meet the federal ozone standard. The proposed amendment to reduce the use of compounds with high GWP is a Discrete Early Action Measure as described in the California Global Warming Solutions Act of 2006 (AB 32). The proposed amendments would achieve about 5.8 tons per day reduction in VOC emissions when all limits are fully effective in 2015. The GWP measure would reduce 0.2 million metric tons of carbon dioxide equivalents per year, and the toxics prohibitions would reduce emissions by about 0.2 tons per day.

The staff proposal included some modifications to the original proposal. Specifically, staff proposed modifications to the definitions for "Floor Maintenance Product," "Personal Fragrance Product," and "Sealant or Caulking Compound." Staff also proposed to remove the definition for "Not for Retail Sale," a modification to the Table of Standards for "Motor Vehicle Wash," and a clarification to the labeling requirement for non-aerosol "Sealant or Caulking Compound."

Public testimony generally supported the staff's proposal. Seventeen individuals testified at the hearing. Eight individuals (representatives of the Consumer Specialty Products Association; WD-40 Company; Stoner Incorporated; National Aerosol Association; Blaster Corporation; CRC Industries, Inc.; and Diversified Brands) expressed support or acceptance for the proposed limits. Seven individuals (representatives of the South Coast Air Quality Management District; Service Employees International Union Local 1877; Coalition for Clean Air; Sierra Club; and American Lung Association of California) expressed general support but voiced concerns regarding janitorial cleaning products, paint thinners, and effective dates. One individual (representative of the Soap and Detergent Association) expressed general support except for the proposal for Fabric Softener - Single Use Dryer Product. One individual (representative of

Personal Care Products Council) expressed opposition to the proposal for Astringent/Toner (non-Food and Drug Administration regulated).

ORAL TESTIMONY:

Barry Wallerstein, South Coast Air Quality Management District Solange Echeverria, Service Employees International Union Laura Rico, Service Employees International Union Bob Hamilton, Soap and Detergent Association Joseph Yost, Consumer Specialty Products Association Mike Freeman, WD-40 Company Harry Zechman, Stoner Incorporated Doug Raymond, National Aerosol Association Paul Gardner, Blaster Corporation Adam Seliske, CRC Industries, Inc. Greg Johnson, Diversified Brands D. Douglas Fratz, Consumer Specialty Products Association Tim Carmichael, Coalition for Clean Air Luis Cabrales, Coalition for Clean Air Jim Mattesich, Personal Care Products Association Bill Magavern, Sierra Club Bonnie Holms-Gen, American Lung Association of California

FORMAL BOARD ACTION: The Board voted unanimously to approve Resolution 08-30 with additional modifications.

RESPONSIBLE DIVISION: Stationary Source Division

STAFF REPORT: Yes

08-6-6: Public Meeting to Consider Approval of Western Mojave Desert 8-Hour Ozone State Implementation Plan (SIP) and Approval of the Ventura 8-Hour Ozone SIP

SUMMARY OF AGENDA ITEM:

Staff proposed approval of plans demonstrating attainment of the federal 8-hour ozone standard in the Western Mojave Desert and Ventura County. The Western Mojave Desert 8-Hour Ozone Attainment Plan, which was adopted by the Mojave Desert and Antelope Valley Air Quality Management Districts, demonstrates that existing and proposed controls, including upwind emission reductions resulting from ARB's 2007 State Strategy, will bring the area into attainment by June 2021. The 8-Hour Ozone Attainment Plan adopted by the Ventura County Air Pollution Control District includes a commitment to adopt four new local control measures. With these measures and reductions from existing measures and the 2007 State Strategy, the Ventura Plan demonstrates attainment by June 2013 and June 2021, respectively.

Testimony supporting the approval of the Ventura County SIP revision was provided by Mr. Michael Villegas, Ventura County Air Pollution Control Officer.

ORAL TESTIMONY:

Mr. Villegas, Ventura County Air Pollution Control District

FORMAL BOARD ACTION: The Board voted unanimously to approve Resolution numbers 08-26 and 08-32.

RESPONSIBLE DIVISION: Planning and Technical Support Division

STAFF REPORT: Yes

08-6-7: Update the Board on the Implementation of the Enhanced Vapor Recovery Program

SUMMARY OF AGENDA ITEM:

Staff presented an update to the Board on the implementation of the Enhanced Vapor Recovery (EVR) program, including progress towards meeting the deadline for EVR Phase II systems. EVR Phase II systems are required at most gasoline service stations in the state by April 1, 2009. An estimated 10,500 stations statewide still need to complete this upgrade.

Staff's analysis indicated that sufficient equipment and contractor resources are available now to complete the EVR Phase II upgrades by the deadline. However, implementation could be delayed by the local permit process and/or difficulties in obtaining financing.

After hearing testimony, the Board directed staff to work closely with the districts to develop criteria for a "good faith effort" to mitigate penalties if delays in reaching compliance are beyond the control of the station owners. The Board suggested that the California Air Pollution Control Officers Association encourage local districts to work more closely with local city/county planning agencies to expedite permitting. The Board also directed staff to investigate ways to provide additional funding for small rural stations.

ORAL TESTIMONY:

Barry Wallerstein, South Coast Air Quality Management District
Barbara Lee, California Air Pollution Control Officers Association
James White, Western States Petroleum Association
Jay McKeeman, California Independent Oil Marketers Assocation
Craig Moyer, Manatt-Phelps
Peter Carpenedo, Dassel's Petroleum
Steve Lopes (no affiliation stated)
David Atwater (no affiliation stated)
Bonnie Holmes-Gen, American Lung Association of California
Bob Brown, Spartan Tank Lines
Brian Hill, Toro Petroleum Corporation
Kathryn Phillips, Environmental Defense Fund

FORMAL BOARD ACTION: None

RESPONSIBLE DIVISION: Monitoring and Laboratory Division

STAFF REPORT: Yes